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REMARKS

Claims 1-29 are currently pending in the subject application and are currently under consideration. A version of these claims is found at pages 2-6. Applicant's representative notes with appreciation the Examiner's indication that claims 5-6, 8-10, 12-13, 18-20 and 26-27 would be allowable if rewritten in independent form to include all of the limitations of respective base claims and any intervening claims. Applicant's representative respectfully reserves the right to do so at a later date. However, such amendments are not presently believed to be necessary in view of the comments herein. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

L Rejection of Claims 11, 15-17, 21-25 and 29 Under 35 U.S.C. §102(e)

Claims 11, 15-17, 21-25 and 29 stand rejected under 35 U.S.C. §102(e) as being anticipated by Uchiyama *et al.* (US 6,400,362). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Uchiyama *et al.* does not teach or suggest the claimed invention.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (quoting Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

Independent claims 11, 22 and 29 recite similar limitations, namely: a method for rendering an image of an object having a curved surface, comprising determining an M number of attributes relating to rendering the image, M being an integer, pre-computing an N number of attributes relating to rendering the image, N being an integer less than or equal to M, computing the M number of attributes, and rendering an image based, at least in part, on the N pre-computed attributes and the M computed attributes.

Uchiyama et al. does not teach or suggest determining an M number of attributes relating to rendering the image. Rather, Uchiyama et al. is concerned with the spatial relationship and placement of a finite number of virtual objects with respect to one another, and further with the

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relative change in perspective of those virtual objects when viewed from a shifting external point of view; nowhere in Uchiyama et al. is it taught or suggested that attributes can be determined based upon rendering the image. Similarly, Uchiyama et al. does not teach or suggest precomputing an N number of attributes relating to rendering the image. Uchiyama et al. simply teaches selecting shape data as geometrical shape models and surface data to be used during processing to determine the relative change in perspective when viewed from a shifting external point of observation. The claimed invention on the other hand, determines which of M attributes relating to rendering an image can be employed in ultimately rendering the image, and which of N pre-computed attributes related to rendering an image are to be used in rendering the image. It is apparent therefore, that Uchiyama et al. is deficient in teaching or suggesting either determining an M number or attributes relating to rendering the image, or pre-computing an N number of attributes relating to rendering the image.

Further, Uchiyama et al. fails to teach or suggest rendering an image based, at least in part, on the N pre-computed attributes and the M computed attributes. Uchiyama et al. is silent on the utilization of its selections on the rendering of the image. The claimed invention on the other hand, utilizes the N pre-computed attributes and the M computer attributes, both M attributes and N pre-computed attributes relating to the rendering of the image, to render an image. Clearly therefore, Uchiyama et al. does not teach or suggest applicant's claimed invention in anyway, and accordingly, this rejection should be withdrawn with respect to independent claims 11, 22 and 22, together with claims that depend there from.

II. Rejection of Claims 1-4 Under 35 U.S.C. §103(a)

Claims 1-4 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Uchiyama et al. It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Uchiyama et al. does not teach or suggest every limitation set forth in the subject claims.

To reject claims in an application under §103, an examiner must establish a prima facie case of obviousness. A prima facie case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to



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one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be found in the prior art and not based on the Applicant's disclosure. See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Uchiyama et al. teaches an image processing method and apparatus for generating and displaying a virtual environment for virtual reality. Specifically, Uchiyama et al. is concerned with the spatial relationship and placement of a finite number of virtual objects with respect to one another, and further with the relative change in perspective of those virtual objects when viewed from a shifting external point of view. Uchiyama et al. does not teach or suggest either a determiner that determines M number of attributes relating to rendering the image, M being an integer, or a second processor that computes the M number of attributes, as recited in independent claim 1.

As discussed supra, Uchiyama et al. does not teach or suggest determining M number of attributes relating to rendering the image, but rather, Uchiyama et al. simply recites selecting shape data as geometrical shape models and surface data to be used during processing to determine the relative change in perspective when viewed from a shifting external point of observation; Uchiyama et al. does not determine a M number of attributes that are related to rendering the image. Thus, Uchiyama et al. does not teach or suggest this novel aspect of the invention as claimed. Further, as the Examiner clearly concedes, Uchiyama et al. does not teach or suggest a second processor that computes the M number of attributes. Thus, since it is apparent that Uchiyama et al. does not teach or suggest each and every claim limitation as recited in the subject claims, this rejection should be withdrawn with respect to independent claim 1 and those claims that depend there from.

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III. Rejection of Claims 7, 14 and 28 Under 35 U.S.C. §103(a)

Claims 7, 14 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Uchiyama et al. in view of Dilliplane et al. (US 6,097,400). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Claims 7, 14 and 28 depend from independent claims 1, 11 and 22 respectively, and Dilliplane et al. does not make up for the aforementioned deficiencies presented by Uchiyama et al. as discussed above. Accordingly, withdrawal of this rejection and allowance of claims 7, 14 and 28 is respectfully requested.

CONCLUSION

The present application is believed to be condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

AMIN & TUROCY, LLP

Himanshu S. Amin

Reg. No. 40,894

AMIN & TUROCY, LLP 24TH Floor, National City Center 1900 E. 9TH Street Cleveland, Ohio 44114 Telephone (216) 696-8730 Facsimile (216) 696-8731